

10/582024

AP20 Rec'd PCT/PTO 08 JUN 2006

18

CLAIMS

1. Method of recovering information in an interactive digital television system (106), in which information from a transmission centre (101) is transported in a data stream (10) to at least one terminal device (111) in which one or more applications (322) are running, the method comprising:

a step of loading and storing the information in a memory (103) provided in the terminal device (111),

a step of receiving (E40) from the at least one application (322) a request to recover the information; and

a step of recovering (E44) of the information from an information carrier (10, 103) containing the information and provision of the duly recovered information to the at least one application (322) sending the request

characterized in that it further comprises the step carried out in the terminal device (111) of searching (E41) for the information, according to at least one predefined selection criterion, in at least one of the information carriers formed by the data stream (10), and the memory (103).

2. The method as claimed in claim 1, characterized in that the search step b) comprises the following sub-step:

searching (Type 1) for the information in the memory (103).

3. The method as claimed in claim 1, characterized in that the search step b) comprises the following sub-step:

searching (Type 2) for the information in the data stream (10).

4. The method as claimed in claim 1, characterized in that the search step b) comprises the following sub-step:

searching (Type 4) for the information in the memory (103) after an unsuccessful search in the data stream (10).

5. The method as claimed in claim 1, characterized in that the search step b) comprises the following sub-step:

searching (Type 3) for the information in the data stream (10) after an unsuccessful search in the memory (103).

5 6. The method as claimed in any one of claims 1 to 5, characterized in that the information is encapsulated in at least one MPEG table identified by a respective table identifier (TID).

10 7. The method as claimed in claim 6, characterized in that the search step comprises the sub-step (E502, E505, E508, E512) of searching for the MPEG table from its respective table identifier (TID) whereas the recovery step comprises the sub-step (E507, E510, E514) of recovering the information from the duly identified MPEG table.

15 8. The method as claimed in any one of claims 1 to 7, characterized in that it furthermore comprises the step of defining at least one the selection criterion by the application (322).

20 9. The method as claimed in any one of claims 1 to 8, characterized in that it furthermore comprises the step of defining at least one the selection criterion by an intermediate software layer (300b, 600) and/or a hardware layer (300c, 600) of the terminal device (111).

25 10. The method as claimed in any one of claims 1 to 9, characterized in that it furthermore comprises the step of defining at least one the selection criterion by the interactive digital television system (106).

30 11. The method as claimed in claim 6, characterized in that it furthermore comprises the step of storing the information and/or MPEG tables in the memory (103) according to a structural organization similar to that of the information and/or MPEG tables in the data stream (10).

35 12. The method as claimed in any one of claims 1 to 11, characterized in that it furthermore comprises the step of formatting (EA4, EB4) the recovered information before supplying the latter to the at least one application (322) sending the request.

13. Information recovery device in an interactive digital television system (106) in which information originating from a transmission centre (101) is transported in a data stream (10) to at least one terminal device (111) in which one or more applications (322) are running, the terminal device (111) being equipped with:

- an information memory (103),
- means (103a) for loading the information into the information memory (103),
- means (211, 322b, 316, 320, 318) for receiving a request sent by at least one the application (322) to recover the information;
- means (211, 322b, 316, 320, 318) for recovering the information from an information carrier (10, 103) containing the information and supplying the duly recovered information to the at least one application (322) sending the request;
- characterized in that it further comprises:
  - means (211, 322b, 316, 320, 318) for searching, according to at least one predefined selection criterion, for the information in at least one of the information carriers formed by the data stream (10) and the information memory (103).

14. The device as claimed in claim 13, characterized in that the search means comprise first additional means for searching for the information in the memory (103).

15. The device as claimed in claim 13, characterized in that the search means comprise second additional means for searching for the information in the data stream (10).

16. The device as claimed in claim 13, characterized in that the search means comprise third additional means for searching for the information in the memory (103) after an unsuccessful search in the data stream (10).

17. The device as claimed in claim 13, characterized in that the search means comprise fourth additional means for searching for the information in the data stream (10) after an unsuccessful search in the memory (103).

18. The device as claimed in any one of claims 13 to 17, characterized in that the information is encapsulated in at least one MPEG table identified by a respective table identifier (TID).

5

19. The device as claimed in claim 18, characterized in that the search means comprise fifth additional means for searching for the MPEG table from its respective table identifier (TID) whereas the recovery means comprise additional means for recovering the information from the  
10 duly identified MPEG table.

20. The device as claimed in any one of claims 13 to 19, characterized in that it furthermore comprises first means for defining at least one the selection criterion by the application (322).

15

21. The device as claimed in any one of claims 13 to 20, characterized in that it furthermore comprises second means for defining at least one the selection criterion by an intermediate software layer (300b, 600) and/or a hardware layer (300c, 600) of the terminal device (111).

20

22. The device as claimed in any one of claims 13 to 21, characterized in that it furthermore comprises third means for defining at least one the selection criterion by the interactive digital television system (106).

25

23. The device as claimed in any one of claims 13 to 22 and claim 18, characterized in that the memory (103) comprises additional means for storing the information and/or MPEG tables according to a structural organization similar to that of the information and/or MPEG  
30 tables in the data stream (10).

24. The device as claimed in any one of claims 13 to 23, characterized in that it furthermore comprises means (601) for formatting the recovered information before supplying it to the at least one application  
35 (322) sending the request.

25. Receiver/decoder device in an interactive digital television system (106), characterized in that it comprises means suited to implementation of the information recovery method according to any one of claims 1 to 12.

5

26. Receiver/decoder device in an interactive digital television system, characterized in that it comprises an information recovery device (103b) according to any one of claims 13 to 24.

10

27. Terminal device in an interactive digital television system, characterized in that it comprises a receiver/decoder device (102) according to claim 25 or 26.

15

28. Interactive digital television system, characterized in that it comprises at least one receiver/decoder device (102) according to claim 25 or 26.

20

29. Interactive digital television system, characterized in that it comprises at least one terminal device (111) according to claim 27.